

In the Claims:

1. (Original) Method for the milling of freeform surfaces on workpieces on a milling apparatus or a milling machine, especially for the 5-axis milling, whereby a workpiece is milled by a tool of the milling machine in such a manner that a desired freeform surface arises, and whereby the tool is moved relative to the workpiece for the milling along at least one tool path defined via support points, characterized in that
  - a) the support points of the or each tool path are defined either in workpiece coordinates or in machine coordinates,
  - b) for each tool path at least one spline is produced in connection with the support points,
  - c) the or each spline is output to a control arrangement of the milling machine, whereby the control arrangement controls the motion of the tool along the or each tool path on the basis of the or each corresponding spline.
2. (Original) Method according to claim 1, characterized in that, when the support points are defined in workpiece coordinates, then six coordinates are specified for each support point.

1 3. (Original) Method according to claim 1, characterized in  
2 that, when the support points are defined in machine  
3 coordinates, then five coordinates are specified for each  
4 support point.

Claims 4 to 7 (Canceled).

1 8. (Original) Apparatus for the milling of freeform surfaces  
2 on workpieces, especially 5-axis milling apparatus, whereby  
3 a tool mills a workpiece in such a manner that a desired  
4 freeform surface arises, with a programming arrangement  
5 (21) for the programming of at least one tool path or  
6 miller path through support points, and with at least one  
7 control arrangement (28) for the control of the motion of  
8 the tool along the or each tool path relative to the  
9 workpiece, characterized in that the support points of the  
10 or each tool path are programmable in workpiece coordinates  
11 or in machine coordinates in the programming arrangement  
12 (21), that means (25) are allocated to the programming  
13 arrangement (21) in order to produce at least one spline  
14 for each tool path in connection with the support points,  
15 and that the means (25) provide the or each spline to the  
16 or each control arrangement (28), whereby the or each  
17 control arrangement (28) controls the motion of the tool  
18 along the or each tool path on the basis of the or each  
19 corresponding spline.

1     9.     (Original) Apparatus according to claim 8, characterized in  
2           that the programming arrangement (21) is embodied as a  
3           CAD/CAM system for the programming of the or each tool  
4           path, whereby the CAD/CAM system produces at least one APT  
5           file (22), which is transferable by at least one subsequent  
6           connected post-processor (26) into at least one control  
7           file (27) that is executable by the or each control  
8           arrangement (28).

Claim 10 (Canceled).

[REMARKS FOLLOW ON NEXT PAGE]